

DOUBLE-WALLED DRINKING VESSEL

FIELD OF THE INVENTION

5 The present invention relates to a double-walled drinking vessel, and more particularly to a double-walled drinking vessel having an inner vessel that is formed on an outer wall surface with a plurality of circumferentially arranged angles, so that a
10 three-dimensional, multi-layered, shinny, and diamond-like relief is naturally created in the drinking vessel when seeing from outside of the drinking vessel.

15 BACKGROUND OF THE INVENTION

Fig. 1 is a perspective view of a conventional transparent double-walled drinking vessel. As shown, the drinking vessel includes a body 1, and an internal
20 cup 2 formed inside the body 1 to define a closed space 3 between the body 1 and the cup 2. The closed space 3 is pre-filled with a predetermined type of refrigerating fluid or refrigerant in the manufacturing process of the double-walled drinking vessel. To
25 highlight the provision of the refrigerating fluid or

refrigerant in the space 3 between the two walls of the drinking vessel, the body 1 and the internal cup 2 must be made of a transparent material. The body 1 and the cup 2 are clear and usually have plain surfaces, making the conventional double-walled drinking vessel monotonous and less attractive in appearance. It is therefore desirable to develop a novel and unique double-walled drinking vessel that presents a three-dimensional, multi-layered, shinny, and diamond-like relief on the vessel.

SUMMARY OF THE INVENTION

A primary object of the present invention is to provide an improved transparent double-walled drinking vessel having an inner vessel that is formed on an outer wall surface with a plurality of circumferentially arranged angles, so that a three-dimensional, multi-layered, shinny, and diamond-like relief is naturally created in the drinking vessel when seeing from outside of the drinking vessel.

BRIEF DESCRIPTION OF THE DRAWINGS

The structure and the technical means adopted by the

present invention to achieve the above and other objects can be best understood by referring to the following detailed description of the preferred embodiments and the accompanying drawings, wherein

5

Fig. 1 is a perspective view of a conventional double-walled drinking vessel;

Fig. 2 is a partially exploded perspective view of a double-walled drinking vessel according to a preferred
10 embodiment of the present invention;

Fig. 3 is an assembled perspective view of Fig. 2;

15 Fig. 4 shows a double-walled drinking vessel according to a second embodiment of the present invention;

Fig. 5 shows a double-walled drinking vessel according to a third embodiment of the present invention;

20

Fig. 6 shows a double-walled drinking vessel according to a fourth embodiment of the present invention;

Fig. 7 shows a closed space formed between inner and
25 outer walls of the double-walled drinking vessel of

the present invention is filled with a type of refrigerating fluid; and

Fig. 8 shows the closed space formed between the inner
5 and outer walls of the double-walled drinking vessel
of the present invention is filled with a type of refrigerant.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

10

Please refer to Figs. 2 and 3, in which a double-walled drinking vessel according to a preferred embodiment of the present invention is shown. As shown, the double-wall drinking vessel includes an outer vessel
15 4, a bottom cover 41, and an inner vessel 5. The inner vessel 5 has an upper open end 51 and a lower closed end 52. The upper open end 51 of the inner vessel 5 has an inner diameter larger than that of the lower closed end 52, and close to that of an upper rim 42
20 of the outer vessel 4. In the illustrated preferred embodiment of the present invention, an outer wall surface of the inner vessel 5 upward extended from the lower closed end 52 to a point slightly below the upper open end 51 is formed into a plurality of
25 circumferentially arranged angles 53 like a polygon,

and an area 54 between two adjacent angles 53 is a curved surface. However, in a second embodiment of the present invention shown in Fig. 4, the area 54 is a straight surface. In the first and the second embodiments, 5 vertexes of the angles 53 are located at a common circle. That is, the vertexes of the angles 53 together define a circumscribed circle. However, in a third and a fourth embodiment of the present invention shown in Figs. 5 and 6, respectively, the angles 53 are not located 10 at a common circle. Even if the angles 53 are not located at a common circle, the inner vessel 5 may still be integrally formed along with the outer vessel 4 to produce the double-walled drinking vessel of the present invention. After the outer and the inner vessel 15 4, 5 are integrally formed, it is possible to fill a closed space 6 formed between the outer and the inner vessel 4, 5 with a predetermined type of refrigerating fluid, as shown in Fig. 7, or with a predetermined type of refrigerant, as shown in Fig. 8. Thereafter, an open 20 bottom of the outer vessel 4 is sealed using the bottom cover 41 to complete a transparent double-walled drinking vessel.

To create a beautiful color vision, it is also possible 25 to particularly form the inner vessel 5 with colored

material, so that the finished drinking vessel presents a completely different visual effect.

In addition to the drinking vessel as illustrated in
5 the accompanying drawings, the present invention may also be implemented as other types of vessels, such as pitchers, ice cans, etc.